

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation by the Department of Public Utilities
on its own motion into IntraLATA and Local
Exchange Competition in Massachusetts

D.P.U./D.T.E. 94-185-E

**INITIAL BRIEF OF AT&T COMMUNICATIONS OF NEW ENGLAND, INC.,
REGARDING PRICE FLOORS**

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Table of Contents.

	Page
INTRODUCTION.....	1
BACKGROUND	2
ARGUMENT.....	5
I. THE PRICE FLOOR CALCULATIONS IN BELL ATLANTIC'S NOVEMBER 2, 1998 FILING COMBINE LOCAL CALLING, TOLL CALLING AND CREDIT CARD SERVICES IN A WAY THAT MAKES IT IMPOSSIBLE TO DETERMINE WHETHER BELL ATLANTIC'S TOLL SERVICES SATISFY THE DEPARTMENT'S PRICE FLOOR REQUIREMENTS BASED ON THE IMPUTATION OF ACCESS CHARGES.....	5
A. Bell Atlantic's Price Floor Analysis Violates The Department's Requirements.	5
1. Bell Atlantic Improperly Averages The Revenues And Costs Of The Toll And Non-Toll Services Included In The Bundled Offerings.....	5
2. Bell Atlantic Compounds The Effects Of Averaging By Incorrectly Calculating The Revenues And Costs Of The Non Toll Portion For Purposes Of A Price Floor Calculation.	9
B. The Department Should Order Bell Atlantic To Compute Correctly A Separate Price Floor For Each Service Included In The Bundled Offerings Or, At A Minimum, A Price Floor Separately For The Toll Service Included In The Bundled Offerings.	10
II. BELL ATLANTIC'S USE OF A 14.12% RETAIL OVERHEAD FACTOR GROSSLY UNDERSTATES THE INCREMENTAL RETAIL COSTS ASSOCIATED WITH THE SERVICES ANALYZED.	12
A. Bell Atlantic's Use Of Separated Data Is Wrong.	13
1. Bell Atlantic Justifies Its Use Of Separated Data On Cost Recovery Principles, Not On Economic Principles.	13
2. As The Department Determined In Its Phase 2 Order, Separated Data Should Not Be Used To Measure Changes In Real, Economic Costs	15

(a)	The Department’s Phase 2 Order Determined That Separated Data Should Not Be Used To Measure Changes In Real, Economic Costs.	16
(b)	The Use Of Separated Data Produces An Economically Incorrect Result.....	16
(c)	There Is No Evidence That The Costs Allocated To The Interstate Jurisdiction By The FCC Separations Process Are Related To Interstate Services Rather Than Intrastate Services.	18
3.	Conclusion Regarding The Separated Data Issue.	21
B.	Bell Atlantic’s Failure To Include A Single Penny Of Indirect Costs Is Wrong.....	21
1.	Indirect Overhead Expenses Vary With The Level Of Output.	22
2.	Bell Atlantic’s Efforts To “Prove” That Indirect Overhead Expenses Do Not Vary With The Level Of Output Comes Too Little Too Late.....	24
CONCLUSION.....		29

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Introduction.

After over three years of litigation, on September 1, 1998, the Department directed Bell Atlantic to file price floors for “non-premium” toll services in order to implement the price floor requirements originally ordered by the Department in D.P.U. 94-50 (May 12, 1995). *See*, D.P.U./D.T.E. 94-185-D, at 11. On November 2, 1998, Bell Atlantic made what it termed a “compliance” filing. As demonstrated below, Bell Atlantic’s November 2, 1998 filing (“November 2, 1998 Filing”) fails to comply with the Department’s requirements for price floors. Indeed, Bell Atlantic, not content to have successfully delayed implementation of the Department’s price floor requirements for three of the five years of the 1995 Price Cap plan, has employed a flawed methodology and deliberately ignored clear Department precedent in three separate areas in order to develop the flawed price floor calculations in the November 2, 1998 filing. Specifically, Bell Atlantic’s November 2, 1998 Filing

- • improperly masks the toll/access relationship by combining revenues and costs of non-toll service with revenues and costs of toll service in violation of the Department’s directive in D.P.U. 94-50 against averaging;

- • understates the “marginal cost of related overhead” by improperly using “separated data” in violation of the Department’s directive in its December 3, 1996 Phase 2 decision in the *Consolidated Arbitrations*;
- • understates the “marginal cost of related overhead” by improperly excluding from it indirect costs, also in violation of the Department’s directive in its December 3, 1996 Phase 2 decision in the *Consolidated Arbitrations*.

These obvious methodological flaws, if not rejected by the Department, will permit Bell Atlantic to place its competitors in a price squeeze for many of the services under consideration in the instant proceeding and will inhibit local and toll competition in the state.

Background

On May 12, 1995, the Department issued its final decision in D.P.U. 94-50, which established a price cap form of regulation for NYNEX. As an "integral" part of that decision (*see*, D.P.U. 94-50-C (June 28, 1995) at 7), the Department established price floor requirements for Bell Atlantic’s services. The Department made clear that its price floor requirement for a service depends on "whether the service is one in which NYNEX controls an essential input for a competitor's offering of a competing service." *Id.* at 205.

The Department stated:

For those services where NYNEX controls an essential input for a competitor's offering of a competing service, in order to prevent anti-competitive pricing, the proper price floor for NYNEX's own rate element shall consist of the relevant wholesale rate that at least one competitor pays to NYNEX in order to offer the service, and NYNEX's marginal cost of related overhead. For all other services, in order to prevent cross-subsidization, the proper price floor shall be the marginal cost, as reported in the company's most recent marginal cost study ("MCS"), MCS VI.

Id. at 205-206.^{1[1]} The Department went on to interpret this price floor standard as applied to the provision of toll:

We find that the link between toll and access rates should be, at a minimum, consistent with our findings in Section VI.C.1.b.ii, *supra*, regarding the proper price floor for NYNEX's services. As noted, where NYNEX controls an essential input for a competitor's offering of a service (which is clearly the case for switched access), we found that the proper price floor for NYNEX's retail rate shall consist of the relevant wholesale rate that at least one competitor pays to NYNEX in order to offer the service, and NYNEX's marginal cost of related overhead. Therefore, at a minimum, this price floor requires that NYNEX's toll rates exceed the relevant access rate plus NYNEX's marginal cost of related overhead. [Original footnote 145 appearing here is set forth in the footnote below.^{2[2]}]

Id. at 249-250.

Bell Atlantic purported to provide price floor calculations in its first price cap compliance filing, D.P.U. 95-83. On October 23, 1995, the Department transferred to this docket (*Local Competition*, D.P.U. 94-185) the issue of whether Bell Atlantic's price floor calculations in its first price cap compliance filing complied with the requirements of D.P.U. 94-50. On February 8, 1996, after the close of evidentiary hearings, and before issuance of a decision (in fact, between the filing of initial and reply briefs), the Telecommunications Act of 1996 (the "Act" or the "1996 Act") was signed into law. In a procedural notice dated April 23, 1996, the Hearing Officers, after comment from the parties, stated that "the Act does not provide substantive or procedural resolution" of, *inter alia*, price floors. *Id.* at 5. As a result, reply briefs were subsequently filed on the

^{1[1]} The Department "direct[ed] [Bell Atlantic] to include in its initial price cap filing [due on July 1, 1995] a listing and calculation of the relevant price floor for each service." *Id.* at 206.

^{2[2]} "We agree with AT&T that related overhead should include marketing and advertising costs; therefore, the Company's proposed differential of \$0.011 should be increased to include such costs." *Id.* at 250, n. 145.

remaining issues, including price floors, and on August 29, 1996, the Department issued its principal order in this case ("Local Competition Order"). With regard to price floors, the Department rejected Bell Atlantic's definitions of "service" and its failure to treat switched access and unbundled links as essential inputs and ordered Bell Atlantic to file a "list of services for which price floors subsequently will be calculated." *Id.* at 30.

On December 3, 1996, pursuant to the Department's Local Competition Order, Bell Atlantic filed a proposed list of services for which price floors would be calculated. On December 20, 1996, also pursuant to the Department's Local Competition Order, Bell Atlantic filed a description of the method it proposed to complete the TSLRIC study required by the Local Competition Order. On June 2, 1997,^{3[3]} the Department rejected both the list of services and the proposed methodology and ordered Bell Atlantic to refile. D.P.U. 94-185-B.

Rather than seeking to comply, however, Bell Atlantic, on June 13, 1997, filed a motion that it styled as a motion "For Clarification And Reconsideration." Although purporting to seek clarification and reconsideration of the Department's June 2, 1997, order (D.P.U. 94-185-B), Bell Atlantic's motion in fact sought relief from the price floor requirements established in the May 12, 1995 decision in D.P.U. 94-50. After at first inadvertently eliminating the imputation-based retail price floor requirement of D.P.U. 94-50, *see*, D.P.U. 94-185-C (December 17, 1997), on September 1, 1998, the

^{3[3]} An earlier version of the same decision was apparently issued on May 30, 1997. The corrected version was issued on June 2, 1997.

Department reinstated the price floor requirement.^{4[4]} In particular, the Department ordered Bell Atlantic

to develop and file a [*sic*] price floors, based on a TSLRIC cost study, for all of its retail toll services (excluding premium toll services), consistent with the findings herein and our earlier orders concerning the parameters of a TSLRIC study, within 60 days from the date of this Order. Following review and approval of those price floors, Bell Atlantic's retail toll services will be required to meet those price floors.

D.P.U. /D.T.E. 94-185-D, at 11.

The Department's order, therefore, restored the requirements of D.P.U. 94-50 relating to price floors. One of the most critical aspects of the Department's price floor requirements in D.P.U. 94-50 related to its prohibition against "averaging" across services. The Department stated:

However, we are persuaded by the arguments of AT&T and MCI that it is no longer appropriate to base this differential [the differential between toll and access] on the average access rate and the average toll rate, as was done in the transition process. *Basing the toll-access link on average rates is inappropriate in this increasingly competitive market because NYNEX could then price anticompetitively for specific customers and/or services while still maintaining the proper differential on average.* Accordingly, NYNEX shall be required to comply with the price floor described above on a service-by-service basis. Consistent with our findings in Section VI.C.1.b.ii, *supra*, the Company shall include with its initial price cap filing a computation of the proper price floor for switched access and for its own toll services.

Id. at 250 (emphasis added). Therefore, it is clear from a long line of Department precedent that Bell Atlantic must file a price floor analysis for its intraLATA toll services

^{4[4]} This price floor requirement had been in effect in one form or another since June 29, 1990 when the Department issued its decision in D.P.U. 89-300, and which had been reaffirmed and strengthened in its May 12, 1995 price cap decision in D.P.U. 94-50 and reaffirmed yet again in this docket. *See, e.g.*, D.P.U. 94-185 (August 29, 1996) at 31-33.

that are packaged as part of its non-premium packaged offerings on a service specific basis.

Argument

I. THE PRICE FLOOR CALCULATIONS IN BELL ATLANTIC'S NOVEMBER 2, 1998 FILING COMBINE LOCAL CALLING, TOLL CALLING AND CREDIT CARD SERVICES IN A WAY THAT MAKES IT IMPOSSIBLE TO DETERMINE WHETHER BELL ATLANTIC'S TOLL SERVICES SATISFY THE DEPARTMENT'S PRICE FLOOR REQUIREMENTS BASED ON THE IMPUTATION OF ACCESS CHARGES.

A. Bell Atlantic's Price Floor Analysis Violates The Department's Requirements.

1. Bell Atlantic Improperly Averages The Revenues And Costs Of The Toll And Non-Toll Services Included In The Bundled Offerings

In D.P.U. 94-50, the Department stated that “this price floor requires that [Bell Atlantic's] toll rates exceed the relevant access rate plus [Bell Atlantic's] marginal cost of related overhead.” *Id.*, at 249-250. Moreover, the Department made clear in D.P.U. 94-50 that aggregate imputation, whereby costs and revenues are averaged across multiple services will not prevent Bell Atlantic from “pric[ing] anticompetitively for specific customers and/or services while still maintaining the proper differential on average.” *Id.* at 250.

Notwithstanding this clear requirement establishing a relationship between toll and access rates, Bell Atlantic's price floor calculations combine toll services with local and credit card services in a manner that prevents toll prices (or revenues) from being compared directly against Bell Atlantic's access charges (or revenues). Thus, there is no way to know whether Bell Atlantic is complying with the Department's requirements.

For example, in its November 2, 1998 Filing, Bell Atlantic concludes that it meets its price floor requirement for Baystate Metropolitan Service because the *combined* retail revenues for the local, toll and calling card services contained in Baystate Metropolitan Service (\$4,129,444) exceed the *combined* cost of providing local service, toll service, and calling card services plus an estimate of retailing costs (\$2,022,493).^{5[5]} See, Exh. BA 3 (Exhibit, p. 2 of 3). There is, however, no assurance from this analysis that the revenues generated by Bell Atlantic's *toll* service exceeds its *access* charges. See, AT&T Exh. 5 (Salvatore Prefiled Testimony), p. 8, lines 7-15.

Baystate (East) Metropolitan service^{6[6]} is an aggregation of separately available services: When an end-user purchases Baystate (East) Metropolitan Service, the end-user obtains: (a) access to the network (*i.e.*, dialtone) for \$9.91; (b) unlimited local service for \$6.94; (c) metropolitan usage for \$14.82;^{7[7]} and (d) one-hour of intra-LATA toll service

^{5[5]} Curiously, Bell Atlantic does not follow its own methodology of including all the costs and revenues associated with the Baystate Metropolitan Service. For unexplained reasons, Bell Atlantic excludes both the cost and the revenues associated with the dial-tone portion of the local service.

^{6[6]} Bell Atlantic uses slightly different names in different places to refer to what is the same plan. For example, in its November 2, 1998 Filing, it refers to this plan as "Baystate Metropolitan." See, BA Exh. 3 (Exhibit, p. 2 of 3). In the front of the White Pages, it refers to the same service as "Bay State East Service." See, AT&T Exh. 1 (2nd page). In the tariff, it refers to the Bay State East Service as the toll portion of the service attached to the Metropolitan Service. See, AT&T Exh. 2 (3rd page).

^{7[7]} "Metropolitan usage" is local usage outside of the immediate contiguous areas. It generally covers the local usage that – absent the plan – is billed on a per minute basis. That is, end-users that pay for dialtone (\$9.91) and "unlimited local usage" (\$6.94, for a total of \$16.85) must also pay on a per minute basis for certain local calls that are placed to Zone 1 and all local calls that are placed to Zone 2 areas. See, AT&T Exh. 1 (1st and 2nd page – "Unlimited Service \$16.85/month"). Instead of paying on a per minute basis for such calls they may purchase the "Metropolitan Service" for (\$9.91 + \$6.94 + \$14.82 = \$31.67), which gives them – in addition to the basic unlimited local usage – local calling to the remaining Zone 1 exchanges and to all Zone 2 exchanges for a flat rate. See, AT&T Exh. 1 (2nd page). (In some exchanges, Metropolitan Service also includes calls to certain other exchanges that would otherwise be intraLATA toll calls. Notwithstanding Ms. Brown's self-serving refusal to acknowledge the obvious, the intraLATA toll portion is very small and, in some cases, not present at all. The Department has specifically found that, despite the occasional intraLATA toll call that sometimes may be included, "Metropolitan Service" is a local service. See, D.T.E. 96-106-(April 9, 1998). Put another way, it is a service that an intraLATA toll carrier cannot compete with because it is made up of virtually all local calls.)

for \$3.00 (*i.e.*, 5 cents per minute).^{8[8]} *See*, AT&T Exh. 4. *See also*, AT&T Exh.'s 1, 2, and 3. *See also*, BA Exh. 1 (Brown Prefiled Direct Testimony), p. 4. Each of the component services is available separately. An end-user has the option of purchasing dialtone only for \$9.91 per month and paying on a per minute basis for all local and toll usage. Alternatively, the end-user may purchase dialtone and the right to make unlimited number of local calls within a specific, usually immediately contiguous area for \$16.85 per month, and pay on a per-minute basis for the remaining local calls. Alternatively, the end user may purchase dialtone and the right to make unlimited number of local calls throughout the entire local area for \$31.67. In all of the foregoing cases, the end-user would be buying intraLATA toll service separately, either from Bell Atlantic or a competitor. One additional way that the end-user could buy the intraLATA toll service from Bell Atlantic would be to purchase the Baystate (East) Metropolitan Service, which would give the end-user the right to make intraLATA calls for one-hour and the further right to make intraLATA calls beyond one hour on a five cents per minute basis.

When establishing price floors for tolls service, *the economic choice faced by the end-user is whether to purchase his or her toll service from Bell Atlantic, either separately or as part of the Bay State East Metropolitan Plan, or purchase it from a competitive intraLATA toll provider.* A competitive intraLATA toll provider is, by definition, only competing for the intraLATA toll service that is included in the Bay State (East) Metropolitan plan. As even Bell Atlantic witness Paula Brown recognizes, when setting price floors *for toll service*, the economic choice is the choice of intraLATA toll provider, not local exchange provider. *See*, Tr. 9/15/99, p. 84 (“What remains of concern

^{8[8]} The end-user also receives a 25 percent discount on credit card calls, for which she pays nothing.

and has been for many years the Department's concern over competitive alternative is *who's only competing for toll.*") (emphasis added). *See also*, BA Exh. 2 (Brown Rebuttal Testimony), p. 5, lines 4-6.^{9[9]}.

When Bell Atlantic includes the costs and revenues associated with non-toll services in its price floor analysis, it is averaging the price/cost relationship of those non-toll services with the price/cost relationship for toll, even though the competition (and the price floor protection) is only for the toll portion. Bell Atlantic can "mask" or overwhelm the price/cost relationship of toll by including revenues and costs of other services. That is, Bell Atlantic could (and probably does in certain calling plans) price its toll service below imputed access plus the marginal cost of related overhead, but because its price for the less competitive, non-toll portion is significantly above the marginal cost for the non-toll portion (*e.g.*, local usage), Bell Atlantic appears to meet its price floor obligation *on average*. This is precisely what the Department has determined that Bell Atlantic should not be able to do in D.P.U. 94-50, at 250.

If the Department did not want Bell Atlantic averaging the effects of different types of toll services (*e.g.*, business vs. residential toll services), then *a fortiori* the Department does not want Bell Atlantic averaging the effects of toll and ***non***-toll services.

2. Bell Atlantic Compounds The Effects Of Averaging By Incorrectly Calculating The Revenues And Costs Of The Non Toll Portion For Purposes Of A Price Floor Calculation.

One reason that Bell Atlantic may benefit from the averaging effect of its price floor calculation relates to the assumptions that it has made regarding the non-toll (*i.e.*,

^{9[9]} "Competitors that compete for only toll are interexchange carriers. They choose switched access or dedicated access, and they do not compete for local service." *Id.* at 5, lines 4-6.

local) portion of the offering. Bell Atlantic has treated local service for purposes of its price floor calculations as a competitive service for which no competitor would need to purchase an input from Bell Atlantic. This is evidenced by the fact that Bell Atlantic includes only the marginal cost of local service. *See*, BA Exh. 3 (Exhibit, p. 2 of 3, lines 3-6). *See also*, Tr. 9/15/99, p. 43, lines 9-23. Use of marginal cost, however, is permissible only when a Bell Atlantic competitor requires no input. Where an essential input is required, Bell Atlantic must impute the rate it charges for those inputs. *See*, D.P.U. 94-50, at 205-206.^{10[10]} Because local exchange service is a service for which essential inputs are required, Bell Atlantic should have imputed the prices that it charges its competitors for the essential inputs for the local service. Bell Atlantic, therefore, should have imputed the price that Bell Atlantic's competitors pay for "local usage" rather than the so-called "marginal cost" of local usage. Bell Atlantic's competitors would pay at a minimum switching prices for local usage based on TELRIC and perhaps local transport as well. *See*, AT&T Exh. 5 (Salvatore Prefiled Testimony), pp. 10-12.^{11[11]}

Because the imputed charges for unbundled switching and transport are significantly higher than Bell Atlantic's "marginal cost" of local usage,^{12[12]} Bell

^{10[10]} "For those services where NYNEX controls an essential input for a competitor's offering of a competing service, in order to prevent anti-competitive pricing, the proper price floor for NYNEX's own rate element shall consist of the relevant wholesale rate that at least one competitor pays to NYNEX in order to offer the service, and NYNEX's marginal cost of related overhead. For all other services, in order to prevent cross-subsidization, the proper price floor shall be the marginal cost, as reported in the company's most recent marginal cost study ("MCS"), MCS VI." *Id.*, at 205-206.

^{11[11]} Technically, Bell Atlantic should also impute the price that it charges competitors for the local loop, which is also a network element that its competitors require to provide local service. If Bell Atlantic were to do that it would be entitled also to include dial-tone revenues and EUCL revenues on the price side. *See*, Tr. 9/15/99, p. 44.

^{12[12]} Bell Atlantic should use the UNE rate for switching rather than the "cost" estimated in the MCS VI. This would replace an artificially low cost estimate (*based on stale 1992 data, see* BA response to record request no. 2 (ATT RR #2), with the higher prices that BA's competitors must pay it for these elements. *See* AT&T Exh. 5 (Salvatore Prefiled Testimony), p. 11. ("The marginal cost of

Atlantic's failure to include them in the local service portion of the price floor calculation makes local service appear as if its prices exceed its (imputed) costs when in fact they do not. By averaging with toll a price floor calculation that appears to show local revenues significantly above local costs, Bell Atlantic is able to mask a situation in which toll revenues are below a properly calculated (imputed) cost of providing toll.

B. B. The Department Should Order Bell Atlantic To Compute Correctly A Separate Price Floor For Each Service Included In The Bundled Offerings Or, At A Minimum, A Price Floor Separately For The Toll Service Included In The Bundled Offerings.

AT&T offered a couple of ways to address the problems in Bell Atlantic's analysis. One way would be to correct the problems in the non-toll portion, so that any averaging would have a less negative effect. This would involve calculating correctly both the revenue and (imputed) cost side of each of the services in the bundled offering before they are added and averaged. *See*, AT&T Exh. 5 (Salvatore Prefiled Testimony), p. 9, lines 3-16. This means, for example, that the UNE local switching rate should be imputed for local usage rather than using marginal cost estimates from MCS VI. *See*, AT&T Exh. 5, p. 24, lines 18-20.

A narrower approach that would focus exclusively on the toll service in each bundled offering would be to

perform a price floor calculation for each *toll* service included in its packaged offering in isolation of other services such as local. This would avoid any difficulties, if any, in discerning or including separate revenues, wholesale prices or retail overhead costs specific to local services. Such a price floor analysis will

local switching included in BAMA's imputation calculations in the instant proceeding is \$.00346/per minute for Business Link and \$.002586 per minute for both Bay State Metropolitan and Non-Metropolitan. In contrast, the comparable price for unbundled local switching usage that a competitor would pay BAMA ranges from approximately \$.015 to \$.020 per minute.") (footnotes omitted).

ensure, at a minimum, that each toll service within a packaged offering passes an imputation test.

AT&T Exh. 5 (Salvatore Prefiled Testimony), pp. 9-10 (emphasis added). *See also, id.* at 24, lines 21-22 (“exclude local service from the price floor analysis”). *See also*, Tr. 9/15/99 (Salvatore), p. 100, lines 14-23.

In order to ensure that one service does not subsidize another AT&T recommends the first approach. As Mr. Salvatore stated in his pre-filed direct testimony, Bell Atlantic’s methodology makes it impossible to “determine if one component service is subsidizing another component service which would otherwise fail a legitimate price floor test.” *Id.*, at 8. Mr. Salvatore, therefore, recommend that “BAMA should be required to perform a service-specific analysis for each service included in its packaged offerings at issue in this proceeding. *Id.*

It is not possible to make this calculation without further information relating to average local and toll minutes of use per customer. *See* DTE Exh. 11 (ATT response to DTE-ATT-3). Even without this adjustment, AT&T’s recalculation of price floors making the adjustment for the retail overhead factor (24.99% instead of 14.12%) shows several of Bell Atlantic’s plans at or in violation of price floor requirements. *See, id.*

II. BELL ATLANTIC’S USE OF A 14.12% RETAIL OVERHEAD FACTOR GROSSLY UNDERSTATES THE INCREMENTAL RETAIL COSTS ASSOCIATED WITH THE SERVICES ANALYZED.

As the Department has clearly articulated, Bell Atlantic must include in its price floor analysis not only the price of access but the retail costs that Bell Atlantic incurs in the provision of its toll services. Inclusion of the proper calculation of this amount ensures that Bell Atlantic competitors that are at least as efficient as Bell Atlantic in the provision of the retail component of the service will not be unfairly subject to a price

squeeze. Indeed, the calculation of the “marginal cost of related overhead” is not an academic exercise. Ultimately, getting this calculation right is critical to the protection of efficient competition in the retail component.

Bell Atlantic’s 14.12% retail overhead factor is based on an “avoided cost” type of analysis similar to the approach that was used for calculating the avoided cost discount in the arbitrations under the 1996 Telecommunications Act (*see* D.P.U. 96-80/81, Phase 2 (December 3, 1996)). This approach seeks to identify in the Bell Atlantic system of accounts expenses associated with the retail function and to calculate the percentage that those expenses constitute of relevant revenues. *See*, BA Exh. 3 (Workpaper 4, page 1 of 3). After that, however, the similarity between the analysis in D.P.U. 96-80/81 and the analysis that Bell Atlantic used in the November 2, 1998 Filing in this docket ends.

The problem is that Bell Atlantic should have remained consistent with the D.P.U. 96-80/81 “avoided cost” methodology. This is because the real world expenses that Bell Atlantic incurs to provide retail service are precisely the expenses that are “avoided” as retail service levels decline.

The retail expenses identified by Bell Atlantic as being avoided in its November 2, 1998 Filing when the retail function is not provided leave out significant expense items that the Department expressly found in D.P.U. 96-80/81 are in fact avoidable when retail service is not offered. In other words, Bell Atlantic should not have left these expenses out of the retail overhead factor because these are expenses that Bell Atlantic does not incur in connection with the provision of retail toll and local exchange service.^{13[13]}

^{13[13]} Bell Atlantic has made no attempt to separate retail expenses associated with toll from those associated with local exchange. In Ms. Brown’s view, there is no way to separate toll related overhead expenses from local exchange related overhead expenses. *See*, Tr. 9/20/99 (Taylor), p. 146, lines 16-18. In calculating the retail overhead factor, Bell Atlantic also (consistently) used

Although there are others, the most glaring omissions in Bell Atlantic's 14.12% calculation are (1) the failure to treat, as avoidable, costs that will actually be avoided when providing access service, simply because they are allocated for FCC separations purposes to the interstate jurisdiction and recovered by Bell Atlantic in other charges; and (2) the failure to treat as avoidable a single penny of indirect costs simply because those costs vary over the long term rather than the short term..

A. A. Bell Atlantic's Use Of Separated Data Is Wrong.

1. 1. Bell Atlantic Justifies Its Use Of Separated Data On Cost Recovery Principles, Not On Economic Principles.

Bell Atlantic's filing treats only a portion of expenses in four accounts as avoided, *i.e.*, retail expenses not related to the provision of access service and thus part of the marginal cost of related overhead:

68.5% of Product Management Expenses (Account 6611)

71.5% of Sales (Account 6612)

69.2% of Product Advertising (Account 6613)

79.9% of Customer Services and Billing (Account 6623).

See, BA Exh. 3 (Workpaper 4, pages 1 & 2 of 3). Bell Atlantic does not claim that the remaining expenses in these accounts do not vary with the provision of retail toll service. Thus, Bell Atlantic does not claim that these expenses are not expenses that comprise the "marginal cost of related overhead" in the provision of intraLATA toll service. Rather, Bell Atlantic apparently believes that these expenses, even though they may vary with the level of toll service provided, should not be so treated simply because they are *allocated*

revenues from both toll and access services. *See*, BA Exh. 3 (Workpaper 4, page 3 of 3). *See also*, Tr. 9/15/99 (Brown), pp. 49-52.

to the interstate jurisdiction for FCC separations purposes. See, BA Exh. 1 (Brown Prefiled Direct Testimony), p. 11, lines 1-9. See also, Tr. 9/15/99 (Brown), pp. 72-74.

Ms. Brown's cross-examination testimony relating to Workpaper 4, page 2 of 3, in BA Exh. 3 makes that very clear:

Q. Q. Did Bell Atlantic or you in this study determine what portion of the expenses in these accounts are caused by the provision of intrastate service?

A. A. They're done on the basis of how our revenues and expenses are separated between state and interstate.

Q. Q. Well, can you explain to the Department why the amount that's excluded from [Column] A does not vary with the provision of intraLATA toll and and local service?

A. A. *It isn't an issue of variance; it's an issue of recovery.*

Q. Q. Oh, it's not an issue of variance?

A. It's an issue of recovery. Those expenses are recovered on the interstate side.

Q. I see. So, in other words, if Bell Atlantic's toll and local revenues increase and as a result its expenses in Column A increase, in your view only a portion of the expenses in Column A should be considered the incremental cost of providing toll and local service because the other portion is recovered under Federal law; is that correct?

A. In Federal charges. That's correct, more or less.

Tr. 9/15/99, pp. 63-64 (emphasis added). Ms. Brown also made clear that it was of no concern to her if use of the Separations process caused her study to exclude from the marginal cost of related overhead expenses that in fact vary with the provision of local and toll service:

Q. ... Do you believe that the expenses that are allocated in the separations process to the interstate jurisdiction by the FCC are unrelated to the offering of toll and local service?

A. They may be and they may not be.

Q. In fact, the allocation process that the FCC uses has little to do with whether the costs are related to local and toll service; isn't that correct?

A. I am not here to judge the process by which the FCC and the joint board have determined recovery. It varies by account. So I would not want to make that kind of blanket statement.

Tr. 9/15/99, pp. 63-64 (emphasis added). Indeed, with respect to one of the principal accounts in her study (*i.e.*, advertising), Ms. Brown agreed that the Separations process does not accurately measure the costs associated with the provision of intrastate (local and toll) services. Tr. 9/15/99, p. 68, lines 1-9.

2. 2. As The Department Determined In Its Phase 2 Order, Separated Data Should Not Be Used To Measure Changes In Real, Economic Costs .

It is disingenuous at best for Bell Atlantic to file a "price floor compliance" filing based on separated data, without any explanation or justification, when (1) the Department has expressly rejected the use of separated data in the calculation of the avoided cost discount (*Consolidated Arbitrations*, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 (Phase 2) (December 3, 1996)), and (2) the price floor standard of "marginal cost of related overhead" is an economic concept designed to measure real, economic costs and has nothing to do with FCC separations. The Department's recognition that it is inappropriate to use separated data to measure real, economic effects and the economic principles underlying that recognition are discussed below.

(a) (a) The Department's Phase 2 Order Determined That Separated Data Should Not Be Used To Measure Changes In Real, Economic Costs.

The Department rejected Bell Atlantic's proposal to use separated data in Phase 2 of the arbitration. *See*, Phase 2 Order at 33. The Department's decision in that proceeding rejected the use of FCC's separations rules on the ground that, when the exercise is to estimate costs that are causally related to an activity, arbitrary accounting rules designed to determine revenue requirements are not relevant. The Department emphasized this point in its Phase 2 Order:

As noted by AT&T and Sprint, the purpose of this proceeding [is] to look at the actual expenses incurred by NYNEX and to determine which of those expenses would be avoided if it were a wholesale company. We are creating a ratio, not determining a revenue requirement. Just as in the case of advertising, *we do not seek to determine which expenses are allowable in retail rates. The jurisdictional distribution of those costs, whether based on an arbitrary interstate/intrastate separation process or, indeed, our own intrastate ratemaking methodology, is not relevant.*

Sprint has succinctly stated the appropriate basis for resolving this issue: *Costs will not be avoided based on jurisdiction, but in total. In addition, we agree that to base the avoided cost determination on the separations process would be to impute a policy of shifting avoided costs between jurisdictions, in the manner historically used to shift local costs to the long distance jurisdiction.*

Phase 2 Order at 33 (emphasis added).

(b) (b) The Use Of Separated Data Produces An Economically Incorrect Result.

The error caused by the use of separated data is that it does not measure all of the incremental (retail) costs – over and above access – associated with providing intraLATA toll service. A price floor based on this approach, therefore, will assume that Bell Atlantic is more efficient than it actually is; it will measure only the incremental costs allocated to the intra-state jurisdiction, rather than all of the incremental costs that Bell

Atlantic incurs to provide intraLATA toll service. The result is that a competitor could have lower real, incremental costs than Bell Atlantic but still not be able to compete because its actual incremental costs may be higher than the *allocated* incremental costs of Bell Atlantic. This creates distorted price signals under which IXCs who are more efficient than Bell Atlantic in their comparable operations will nevertheless be unable to compete.

AT&T witness, William Salvatore, provided an example of the distortions created by using separated data. *See*, Tr. 9/15/99, pp. 101-110. Mr. Salvatore began his example with the hypothetical that Bell Atlantic charges 5 cents per minute for toll; it charges 3 cents per minute for access to its competitors, and it incurs 2 cents per minute in the non-access costs of providing toll service. *See*, Column A in Chart attached hereto (based on Tr. 9/15/99, pp. 101-110). In this example, Bell Atlantic is satisfying its price floor requirement because its retail price (5 cents) is not less than the price of access to competitors (3 cents) plus Bell Atlantic's marginal cost of related overhead (2 cents). Also, in this example, it is assumed that AT&T is equally as efficient as Bell Atlantic in providing the non-access portion of toll service, so that its own marginal cost of related overhead is 2 cents. *See*, Column B in attached Chart. Under this scenario, AT&T is able to charge the same competitive price for its toll service as Bell Atlantic charges (*i.e.*, 5 cents per minute) and recover its costs.^{14[14]}

In Column C, Mr. Salvatore shows what happens to the price floor analysis when separated data are used to calculate the marginal cost of related overhead. In this

^{14[14]} Unlike Bell Atlantic, however, AT&T is able only to cover its costs and not make an additional profit. Because the price that Bell Atlantic charges AT&T for access is substantially greater than the cost of providing such access, Bell Atlantic is able to more than cover its costs of toll service when it charges 5 cents per minute.

scenario, nothing has changed from Column A with regard to the costs that Bell Atlantic actually incurs to provide the non-access portion of toll service. However, solely for price floor purposes, instead of using all of the costs that Bell Atlantic incurs to provide the non-access portion of toll service, only those costs that are allocated to the intrastate jurisdiction are used, which are assumed in this example to be 1.5 cents. *See*, Column C, Row 2. Bell Atlantic may now lower its retail toll price to 4.5 cents per minute without violating the price floor requirement. The result is that, even though Bell Atlantic and AT&T are equally efficient, AT&T is unable to compete with Bell Atlantic in the retail toll market.

Bell Atlantic is able to charge a rate based on the price of access plus something less than the cost of the non-access portion precisely because it is recovering its actual non-access costs elsewhere, principally in access charges, which are priced significantly above costs. Even though the AT&T and other interexchange carriers incur exactly the same non-access costs as Bell Atlantic in this example, they have no way to recover those costs except in a retail rate that includes them in the non-access portion. *See*, Tr. 9/15/99 (Salvatore), p. 107, lines 12-14, and p. 108, lines 9-15. (To add insult to injury, AT&T and other interexchange carriers are actually the source of funding for Bell Atlantic to subsidize the below cost, non-access portion of its toll service, because the interexchange carriers pay above cost rates for access.) Thus, Ms. Brown's justification for using separated data (*i.e.*, non-access costs are recovered elsewhere) is actually the very reason that separated data should not be used.

(c) (c) There Is No Evidence That The Costs Allocated To The Interstate Jurisdiction By The FCC Separations Process Are Related To Interstate Services Rather Than Intrastate Services.

The reason that use of separated data produces an economically incorrect result is that the separations process does not allocate costs to interstate services on a cost-causative basis, even assuming there are interstate costs in Bell Atlantic's accounts. In a last-ditch effort to salvage its use of separated data, however, Bell Atlantic sought to claim that the FCC Separations process is as good a method as any for allocating expenses between the intrastate and interstate jurisdictions (albeit with significant caveats that undermine the force of this new and extraordinary claim).^{15[15]} Such a claim, advanced for the first time in hearings in this matter by Bell Atlantic witness William Taylor, after all direct testimony and rebuttal testimony had been filed giving other reasons (*i.e.*, rate recovery reasons) for the use of separated data, and after Ms. Brown had testified orally giving other reasons, rings hollow at best.

Bell Atlantic latches on to the notion that there may be some expenses in the four accounts it includes in its retail overhead factor (*see*, BA Exh. 3 (Workpaper 4, p. 2 of 3)) that relate to interstate services to claim that it must use separated data. There is, however, a significant failure of proof in moving from the notion that there may be interstate expenses in these accounts to the conclusion that the FCC separations process properly identifies those expenses. Mr. Salvatore's oral testimony on this issue cannot be improved upon:

^{15[15]} After making what is hardly a ringing endorsement of the separations process ("separations, as I understand the separations process, it is not a bad approximation in some respects."), Dr. Taylor goes on to state: "That is, it's not economic costs; don't get me wrong. It's all based on accounting costs." Tr. 9/20/99 (Taylor), p. 150, lines 19-23.

Maybe we should take a look at the November 2nd, 1998 filing and take a look at Workpaper 4, page 1 of 3. That's the workpaper that Ms. Brown was discussing, and that's where it shows the unseparated expenses and the percent of those expenses that are [allocated to] intrastate. ... So about \$84 million have been removed from the analysis because Bell Atlantic considers that to be [interstate] expenses.

Mr. Adhanom, I'm willing to concede that some of the money in Column A is probably incurred for Bell Atlantic to provide interstate services. What I'm not willing to concede is that 34 percent, or 84 million, of that money is directly incurred in the process of Bell Atlantic providing interstate services.

We could look at almost any of these. Let's look at product advertising. ... Ms. Brown conceded that there's no advertising in the form of TV ads, radio ads. There might be some advertising in the form of pamphlets or some other information that Bell Atlantic provides to wholesale providers [*i.e.*, interexchange carriers]. But the fact is that there is no way over 30 percent of those costs [is] being spent on interstate expenses. The primary interstate service that Bell Atlantic provides is interstate access. There is no way, being a monopoly service, that they need to advertise that.

Customer service and billing: Let's look at that. Customer service means that Bell Atlantic has a center. If someone has a question about their service, about a bill, how they can order additional vertical features, or any of their needs, they call up this center. The fact is that Bell Atlantic has millions of retail customers. It only has a couple of interexchange carriers buying interstate access from them. So the amount of money that Bell Atlantic could possibly spend by an interstate carrier calling up [to complain or ask questions] has to be minuscule compared to the millions of customers that Bell Atlantic has to deal with on a retail basis every day.

So ... if [Bell Atlantic] can do a study and truly show how much of the interstate expenses – how much of these total expenses are directly caused by the provision of interstate services, then they should do it, remove that from this calculation, and come up with a more accurate retail-overhead percent. If they can't do it, separations is not the answer.

To say that some of these expenses are relative to the provision of interstate service and to say that 30 percent of the expenses are relative interstate service is just a wide gap. It should be Bell Atlantic's responsibility to show in a study how much of these services are truly, as you said, real interstate expenses, as opposed to relying on a separations process which Ms. Brown conceded is arbitrary and everyone knows is arbitrary.

Tr. 9/15/99, pp. 112-115. Indeed, as noted above, Ms. Brown agrees with Mr. Salvatore that the separations process allocates more advertising expenses to the interstate jurisdiction, and less to the intrastate jurisdiction, than is warranted. Tr. 9/15/99, p. 68, lines 1-9. With regard to the FCC separations process in general, Ms. Brown is unwilling to state that it rationally allocates expenses between intrastate and interstate services on any kind of cost causation basis. Tr. 9/15/99, p. 65, line 13 – p. 66, line 2.

As the Department well knows, the Separations process does not rationally allocate expenses on a cost-causation basis because one of its purposes is to shift some local costs to the interstate jurisdiction so that such costs will be recovered in long distance rates. Tr. 9/15/99 (Salvatore), p. 115, lines 17-21. Notwithstanding Dr. Taylor's literally incredible statement that "if [the FCC separations process] has a bias, I don't know what that bias is,"^{16[16]} a purpose of shifting costs (for recovery purposes) from the intrastate to the interstate jurisdiction creates a bias that overstates the amount of costs treated as interstate by the FCC separations process.

^{16[16]} Dr. Taylor's feigned ignorance of "what that bias is" is later belied by his admission that he is aware of "discussions in which it's often been stated that the separations is intended to produce a situation in which some of the intrastate service costs are recovered in charges on the interstate service." Tr. 9/20/99, p. 153, lines 4-10.

3. Conclusion Regarding The Separated Data Issue.

Given the inherent bias in the FCC separations process, Bell Atlantic's unwillingness to justify its use on the ground that it rationally allocates costs between the inter- and intra-state jurisdictions, and Bell Atlantic's justification for using the separations process on fallacious cost-recovery grounds, the Department should reject Bell Atlantic's use of separated data. Consistent with the Department's reasoning in the Phase 2 Order, the Department should order Bell Atlantic to use unseparated data to develop its retail overhead factor.

B. Bell Atlantic's Failure To Include A Single Penny Of Indirect Costs Is Wrong.

Bell Atlantic's 14.12% retail overhead factor assumes that no "indirect" overhead expenses will vary with increases or decreases in the provision of toll service. No such expenses are included in the expenses identified in the November 2, 1998 Filing. *See*, Exh. BA 3 (Workpaper 4, page 2 of 3). Bell Atlantic makes this assumption despite clear Department precedent finding that the level of overhead and support expenses will vary with the level of retail operations. *See, Consolidated Arbitrations*, Phase 2 Order (December 3, 1996) at 29 ("it is reasonable to expect that, were NYNEX's retail business to diminish, so would its accompanying overhead and support expenses."). The Department's finding in the Phase 2 decision follows the findings of the FCC, which stated: "It is also true, however, that the overall level of indirect expenses can reasonably be expected to decrease as a result of a lower level of overall operations resulting from a reduction in retail activity." FCC First Report and Order, para. 912.

Bell Atlantic's justification for ignoring indirect expenses is slim at best. In her direct testimony, Ms. Brown takes issue with AT&T's December 18, 1998 Comments on

the November 2, 1998 Filing pointing out Bell Atlantic's failure to take into account indirect expenses. Her testimony, however, is limited to (purportedly) explaining why the avoided cost discount, which includes indirect expenses, should not be used to calculate the marginal cost of related overhead. *See*, BA Exh. 1, p. 9, line 14 - p. 10, line 8. *Nowhere does she explain why indirect overhead expenses will **not** vary with the level of retail toll service*, beyond the conclusory assertion that such expenses will continue because Bell Atlantic will still be offering other retail services. *Id.*, p. 10, lines 14-16. Ms. Brown's rebuttal testimony simply repeats her assertions made in her direct testimony. *See*, BA Exh. 2, pp. 6-7.

1. Indirect Overhead Expenses Vary With The Level Of Output.

Bell Atlantic's conclusory assertion suffers from a basic confusion: Bell Atlantic apparently equates the fact that the *type* of expense will continue with an (unsupported) prediction that the *level* of expense will continue. Moreover, Bell Atlantic fails to consider the real world implications of what happens to the indirect overhead expenses of a company that is losing (or gaining) customers and revenues. The company does not simply decline to react. It adjusts its operations to changes in the level of demand.

For example, Ms. Brown's analysis assumes that, if Bell Atlantic's retail outputs declined, there would be fewer workers and that therefore the expenses for employees responsible for customer service and billing would decline. *See*, Tr. 9/15/99, p. 53. Ms. Brown totally ignores, however, any expenses incurred to support the former employees. She ignores the buildings in which they work, the equipment that they use to provide customer service and billing, the furniture in their offices, and the salaries of the human resources and accounting staff necessary to support them. *See*, Tr. 9/15/99, pp. 53-57.

See also, ATT RR #1. She also ignores the likelihood that a decline in the number of customers would mean a decline in operator services and all of the expenses associated with supporting that workforce. *See*, Tr. 9/15/99, p. 58.

The above discussed indirect expenses, however, are real and can be reduced if the company's output declines. No company could stay in business in a competitive market for long if, when its employees departed and were not replaced, it nevertheless left the computers sitting on the desk, the furniture in an empty room, vehicles (for sales staff, for example) idle in the parking lot, and whole buildings and the land that they are on unoccupied or under utilized. Those resources are either liquidated or redeployed for other purposes. In either event, they do not continue as costs of the declining service.

2. Bell Atlantic's Efforts To "Prove" That Indirect Overhead Expenses Do Not Vary With The Level Of Output Comes Too Little Too Late.

Despite the obvious and reasonable expectation that the level of overhead expenses will most certainly vary with the level of the firm's operations,^{17[17]} Bell Atlantic waited until the rebuttal testimony of Bill Taylor to attempt to address this issue – at a point in time when AT&T no longer had an opportunity under the schedule to respond. Such an attempted demonstration (to disprove a reasonable assumption and a previous finding of the Department on a central issue in the case) properly belongs in

^{17[17]} Even Dr. Taylor agreed that it is a reasonable working assumption that the level of overhead and support expenses is related to the size of the operation of the firm:

Q. Q. Would a telecommunications company serving a thousand people in Brookline have the same administrative and legal and other indirect overhead costs that a telecommunications company serving all of the rest of Massachusetts had?

A. A. Probably not.

Tr. 9/20/99, p. 155. Dr. Taylor then goes on to state that "it is certainly economically conceivable that, as output actually changes for either Brookline Tel. or for Bell Atlantic, that certain elements of overhead costs do change." *Id.*, pp. 155-156.

Bell Atlantic's direct case, because it is Bell Atlantic's burden in proving the "marginal cost of related overhead" to prove which costs do, and which costs do not, vary with the level of output.

In any event, Bell Atlantic has failed to meet its burden with Dr. Taylor's late-filed "statistical analysis." Dr. Taylor performed a regression analysis in which he used as the dependent variable the sum of expenses in the Executive and Planning, Accounting and Finance, Legal and Other General Administrative Accounts. *See*, BA Exh. 4 (Attachment 1, Table 1). Dr. Taylor's regression analysis then related variation in this indirect expense variable (variation across companies and years) to variation in certain measures of size and output (*e.g.*, business lines, residential lines, local calls, toll calls, access minutes). *See, id.* (Table 2). *See also*, Tr. 9/20/99 (Taylor), pp. 157-158. After performing literally *one* regression analysis on *one* model specification and finding no statistically significant relationship between the measures of firm size and/or output and the level of indirect expenses, Dr. Taylor confidently concludes that the reasonable, indeed obvious, proposition that administrative overhead expenses are related to the size and output of an efficiently adaptive firm must not be true. *See*, BA Exh. 4 (Taylor Rebuttal Testimony), p. 7.

Dr. Taylor's analysis is rife with problems. First, he uses as separate independent variables the number of business lines, the number of residential lines, the number of public lines, the number of special access lines, the number of local calls, the number of toll calls and the number of access minutes. It does not take a statistical genius to recognize that all of these variables are measuring essentially the same thing – the size of

the firm and its operations.^{18[18]} Yet, Dr. Taylor's analysis treats them as if they are measuring independent variables. The result is that when Dr. Taylor puts all of these variables into the regression analysis as separate independent variables at the same time, the regression analysis – for each independent variable – tries to relate only the part of that variable's variation that is different from the variation in the other independent variables to indirect costs.^{19[19]} This means that the regression analysis is relating the independent variation of each size/output variable against the indirect expense variable and finding no relationship.^{20[20]} This is not surprising when it is the joint, or combined, variation of these size/output variables that most likely relates to indirect expenses.^{21[21]}

^{18[18]} Technically, the problem of independent variables that measure the same thing, or vary together, is called "multicollinearity." See, Tr. 9/20/99 (Taylor), pp. 160-162.

^{19[19]} "When multicollinearity occurs, it is as if members of a subset of explanatory variables act always in unison. As a result, the data lack sufficient independent variation to allow us to sort out the separate effects of each [independent variable]. The greater the degree of multicollinearity that obtains, the more arbitrarily and unreliable does least squares allocate the sum of explained variation among the individual explanatory variables. Multicollinearity results in parameter estimates that are (1) discomfitingly sensitive to changes both in the precise model specification and the precise data set being employed, and (2) possessed of inordinately high standard estimates [*i.e.*, very imprecise]. Multicollinearity must, therefore, be regarded as a 'black mark' that reduces our confidence in conventional tests of the significance of the various [parameter estimates]." Tr. 9/20/99, pp.162-163 (Dr. Taylor reading from econometrics textbook). (While Dr. Taylor disagreed that multicollinearity is necessarily a "black mark," he generally agreed with the technical description of multicollinearity.)

^{20[20]} It is important to note that the failure to find a statistical relationship in a particular test run does not necessarily mean that there is not one. It just means that the test that was used did not disclose a relationship. The very careful wording that Dr. Taylor uses indicates how limited the finding of his analysis, even with all of its flaws, is: "Since this statistic is not significant at the 5 percent level of confidence, we cannot reject the null hypothesis that telephone company outputs have no effect on overhead expenses." BA Exh. 4 (Attachment 1, p. 4). In other words, the most Dr. Taylor is able to say is that he cannot rule out the possibility that there is no relationship between output/size and indirect expenses. After only one statistical test, with all of its flaws, this is hardly proof that there is no relationship.

^{21[21]} Although Dr. Taylor claims that he tested the joint, or combined effect, by using an "F-test" (see BA Exh. 4 (Attachment 1, p. 4)), it is not at all clear why Dr. Taylor did not simply rerun his regression analysis using each of the independent variables separately. Perhaps he was afraid that a direct test of the relationship between a size/output variable and indirect expenses might show a statistically significant relationship.

Second, he treats as independent observations the indirect expenses of Bell Atlantic-Delaware, Bell Atlantic –Maryland, Bell Atlantic-New Jersey, Bell Atlantic Pennsylvania, Bell Atlantic Virginia, and Bell Atlantic West Virginia. The expenses for these companies are not, however, independent in the statistical sense. The expenses for each of these companies are derived in large part from the expense of a single company, and they are derived by using an arbitrary accounting allocation. The difference in indirect expenses between the various Bell Atlantic companies does not reflect behavioral differences; it reflects the allocation convention that was used to allocate indirect expenses among those companies. As a result, Dr. Taylor’s model specification violates the assumption of statistical independence between observations, which undermines the validity of his results.^{22[22]} While Dr. Taylor argued that there may be some differences in indirect expenses between the state subdivisions of Bell Atlantic that are sufficient to make them independent, he conceded that he had no idea how much. Tr. 9/20/99, p. 178, lines 9-11.

Third, he uses a data set that is hardly representative of efficient companies in a competitive market. Indeed, Dr. Taylor uses only regulated incumbent local exchange carriers to estimate the relationship between indirect overheads and the size and/or output of a firm. Tr. 9/20/99 (Taylor), p. 194, lines 14-19. This is a problem for Dr. Taylor because, as Dr. Taylor admits, he should be measuring “the adjustments that an efficient firm operating in a competitive market, would make to its overhead costs in response to

^{22[22]} Recognizing that the relationship of indirect expenses for all the Bell Atlantic entities violates the assumption of statistical independence required for least-squares regression analysis, Dr. Taylor suddenly claimed that his analysis wasn’t an ordinary least squares analysis after all. *See*, Tr. 9/20/99 (Taylor), p. 179, lines 9-12. Dr. Taylor’s sudden claim in cross-examination, however, contradicts his own description of his analysis filed with his rebuttal testimony. *See*, BA Exh. 4 (Attachment 1, p. 2).

changes in output.” Tr. 9/20/99 (Taylor), p. 195, lines 16-21. Yet, Dr. Taylor did not include a single unregulated telecommunications company in his sample, nor did he include other technology companies operating in an unregulated, competitive market. Tr. 9/20/99, p. 198. This is a significant consideration because, as even Dr. Taylor admits, his analysis “says something about whether an efficient firm would vary its overheads in relation to changes in output only to the extent that these regulated firms ... in [his] study behave like efficient ones.” *Id.*, pp. 194-195. Given the sample that Dr. Taylor used, it is hardly surprising that he failed to identify efficient adaptive responses.^{23[23]}

Fourth, he includes as independent variables the identity of each of the companies in his sample. The purpose of these variables is “to capture the effect that each of these companies has on overheads independent of its size.” Tr. 9/20/99, p. 168, lines 4-7. The *effect* of including such variables, however, is to use up “degrees of freedom,” which makes less precise the estimate of the relationship between size/output and overheads, making it less likely to find a statistical relationship between size/output and overheads (a result, of course, that Dr. Taylor desires). *Id.*, p. 169. Dr. Taylor defends his decision to include these variables on the ground that excluding them might somehow “bias” the estimate of the relationship between size/output and overheads. *Id.*, pp. 169-170. Dr. Taylor, however, has no *a priori* reason to believe that there is a bias in one direction or another. *Id.*, p. 170, lines 11-17. In short, in the absence of any theoretical basis for believing that the omission of these variables would bias the results in one direction or

^{23[23]} Dr. Taylor’s results are almost certainly explained by the fact that he analyzed incumbent local exchange carriers at a time when they were paring down their bloated cost structures in preparation for competition (early to mid-nineties, *see* BA Exh. 4, p. 1, line 27), which occurred at the same time that the output measures (*e.g.*, access minutes, toll calls, *etc.*) were generally rising in accordance with long-term trends. In other words, Dr. Taylor is simply picking up the effects of regulated utilities eliminating their accumulated inefficiencies in preparation for competition. *See*, Tr. 9/20/99 (Taylor), pp. 225-226.

another, Dr. Taylor includes them when he knows that their inclusion will reduce the likelihood of finding a statistical relationship between size/output and overheads. And, significantly, he refuses to even consider testing a model specification that excludes the firm-specific variables. *Id.*, pp. 171-172.

Fifth, and perhaps most telling, Dr. Taylor performed a single regression analysis and, when he obtained a result that supported his client's requirements (no relationship between output/size and indirect expenses), he abruptly stopped. He stopped even though he knew that the model specification and data he was using had the potential to make it more difficult to detect a relationship between size/output and overheads. This is hardly disinterested research likely to yield an unbiased result. Indeed, in a review of Dr. Taylor's work published *prior to* the time he became a paid consultant on behalf of private clients (when he joined NERA in 1988, *see* BA Exh. 4 (WET Exhibit 1, p. 2 of 34)), Dr. Taylor – whenever he tested an empirical relationship – always performed several regression analyses, testing several different model specifications, before he reached conclusions that he was willing to publish. *See*, Tr. 9/20/99, pp. 186-189. Dr. Taylor justified his decision to use only one model specification in this case on the ground that his model was derived from a theoretically correct “production function.”^{24[24]} Tr. 9/20/99, pp. 164-165. Yet, Dr. Taylor admitted that he had never before seen a production function (which is derived from factors of production) specified *using overheads as a factor of production!* Tr. 9/20/99, pp. 165-166. In short, Dr. Taylor's unusual decision to stop his analysis after one statistical test was motivated by

^{24[24]} Indeed, Dr. Taylor came about as close as any economist ever has to the expression “Don't confuse me with the facts.” *See*, Tr. 9/20/99, p. 184, lines 11-13 (“The particular issue we're speaking about now is one that I don't need the data to tell me.”).

the results of the test, not the theoretical certainty of the production function that it was based on.

Conclusion.

For the reasons stated above, the Department should direct Bell Atlantic to recalculate its price floor analysis:

- ▪ perform a price floor calculation for each of the services in the bundled offering using TELRIC prices for the cost of local service elements that a competitor must purchase, or in the alternative perform a price floor calculation for each *toll* service included in its packaged offering in isolation of other services such as local;
- ▪ calculate the marginal cost of related overhead using whole company (*i.e.*, unseparated data); and
- ▪ include in the marginal cost of related overhead indirect overhead expenses that vary with the level of output.

Moreover, until Bell Atlantic complete a proper price floor analysis in accordance with the above requirements, the Department should require Bell Atlantic immediately to satisfy a price floor requirement that uses the 24.99% avoided cost discount as its marginal cost of related overhead.

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CERTIFICATE OF SERVICE

I hereby certify that I caused a true copy of the above document to be served upon the attorney of record for each other party on January 18 2000
